Storytelling your thesis

Megan Brewer, PhD
GR Development Advisor (STEMM)

Jen Rowland, PhD
Senior Lecturer, Researcher Development and Training
FMHHS Faculty Director - Master of Research

“Science is not finished until it’s communicated”
Sir Mark Walport
(former UK Government Chief Scientific Advisor)

Graduate Research Academy
Lincoln Bldg, 16 Wally’s Walk, Level 2
Why enter

• Develop skills:
  • effective communication
  • information and digital literacy
  • visual story telling

• Helps you see the bigger picture of your thesis

• Distil the essence of your research into a succinct and engaging sound bite
What can make/break a presentation?

- Content
- Delivery
- Visuals
What can make/break a presentation?

Content

Delivery

Visuals
Engaging your audience

Present your research problem in an accessible & *immediately understandable* way

- Start **specific & concrete**
- Highlight a **surprising** fact

Some suggestions for the hook

Everyday phenomena: *Have you ever wondered why* ...

A hypothetical scenario: *Imagine if you*...

Direct advice: *If you’re thinking of X, (don’t) do Y!*

Conduct an informal survey: *Hands up if you*...

Shocking statistics/facts: *Did you know that*...?

A common misconception: *I always assumed ... BUT* ...

A paradox: *Why is it that* ...

Take 2 minutes now to think AFRESH about your research. Finish one of these suggestions
Tell them a story
ABT Template

Beginning

End

Middle

Link it back to the hook

What is the impact of your research? (i.e., what does it mean for the future?)

What is the big picture problem?

Why is it important? (i.e., why should we care?)

What do we already know about it?

What is the knowledge gap?

BUT

What are your findings so far and why are they remarkable?

Therefore

How is your research aiming to fix the problem or address the knowledge gap?

https://www.animateyour.science/post/how-to-write-a-winning-3mt-script
Play with different ‘genres’

AND: SET UP - BACKGROUND
BUT: PROBLEM - CONFLICT - DRAMA
THEREFORE: JOURNEY -> SOLUTION
*SOURCE: DR. RANDY OLSON

https://www.animateyour.science/post/tell-them-a-story-how-to-avoid-the-standard-boring-presentation

Nicola Rivers: Everything not saved will be lost
Use simple language

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<table>
<thead>
<tr>
<th>My research</th>
<th>My video</th>
</tr>
</thead>
<tbody>
<tr>
<td>Murray River Rainbowfish and Western Rainbowfish</td>
<td>“fish”</td>
</tr>
<tr>
<td>Cryopreservation of testis and ovarian tissue</td>
<td>“freeze”</td>
</tr>
<tr>
<td></td>
<td>”reproductive”</td>
</tr>
<tr>
<td></td>
<td>tissue”</td>
</tr>
<tr>
<td>In vivo (via transplant) and in vitro (via cell culture) production of sperm and oocytes</td>
<td>Visual of cell division → making new fish</td>
</tr>
</tbody>
</table>
The Title

• Doesn’t have to be your thesis title
  Eg “Structures and features in complex visual stimuli: assisting identification in forensics” → “Suspects, Science and CSI”
• Informative but accessible
  “The paradox of listening to sad music”
• Colloquialisms and questions permissible
  “Do children with autism have an inner voice?”
• Can be technical
  “The Role of Epithelial-Mesenchymal Transition (EMT) in the pathogenesis of Obliterative Bronchiolitis (OB) in Lung Transplant Recipients”
Title examples

Thesis: The area of Pylons Four, Five and Six at Karnak Temple: assessing the architecture, sequence of construction and ensuing historical implications

3MT: Reconstructing the Experience of the Ancient Egyptian Karnak Temple

Gillian Smith (Winner MQ Final, 2019)

Thesis: Decoding hidden language: towards a reliable neural assessment of language comprehension in minimally-verbal autistic children

3MT: Can the brain speak when the mouth cant?

Selene Pitt (Winner MQ Final, 2018)
What can make/break a presentation?

- Content
- Delivery
- Visuals
FLAXSEED'S PARADOXICAL ROLE IN INCREASING THE LIFESPAN AND REPRODUCTIVE CAPACITY OF WHITE LEGHORN LAYING HENS

William Chris Weston (PhD Candidate)
Dept: Molecular, Cellular & Systemic Physiology
Mentor: Dr. Dale B. Hales

Background and Methods:
White Leghorn laying hens (n = ~168 hens per group) were supplemented with different dietary constituents (e.g. defatted flaxseed or whole flaxseed) for 325 days. Blood plasma metabolites were analyzed via liquid chromatography tandem mass spectrometry (LC-MS/MS), in order to evaluate one-carbon metabolism in hens. Daily survival and egg laying were also monitored by diet group.

CONCLUSION: Flaxseed (via the action of 1ADP) induces a strong transsulfuration perturbation that reverses homocysteine flux, causing increased consumption of one-carbon donor molecules, increased SAM synthesis and increased methylation capacity in the hen. The associated outcomes are improved lifespan and/or increased daily egg laying. Flaxseed is a new form of nutritional biotechnology.
Amplify and Simplify

From this...

% Dietary Intake

Protein-Rich Foods  Fruit & Vegetables  Whole Grains

...to this!

- 25% Protein-rich foods
- 50% Fruit & Vegetables
- 25% Whole grains

https://www.animateyour.science/post/how-to-design-an-impactful-3mt-slide-with-examples
Keep it simple

“I am Lucy and I have so much to say.

Amazingly I was rescued from silence …”

- Lucy, aged 8 years

Selene Petit, Faculty of Human Sciences
(MQ Winner and Asia-Pacific runner-up, 2018)
Make it relevant to the story

Trust Evaluation on Twitter

Peiyao Li, Faculty of Science and Engineering (People’s Choice award for Department and Faculty Heats, and MQ Final, 2018)
What can make/break a presentation?

- Content
- Delivery
- Visuals
Use voice modulation to engage the audience

**Pitch**

- Mood
- Attitude
- Intention

**Tone**

- Personality
- Mood
- Attitude

**Volume**

- Confidence
- Energy
- Interest

**Pace**

- Excitement
- Nervousness
- Boredom

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**Indicates**

- Mood
- Attitude
- Intention

**Pitch**

- High
  - Excitement
  - Surprise
  - Curiosity

- Low
  - Authority
  - Seriousness
  - Calmness

**Tone**

- Loud
  - Enthusiasm
  - Urgency
  - Anger

- Soft
  - Intimacy
  - Sincerity
  - Gentleness

**Volume**

- Loud
  - Passion
  - Urgency
  - Importance

- Soft
  - Intimacy
  - Secrecy
  - Suspense

**Pace**

- Fast
  - Excitement
  - Urgency
  - Enthusiasm

- Slow
  - Importance
  - Seriousness
  - Calmness

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[https://www.linkedin.com/advice/0/what-some-voice-modulation-exercises-techniques](https://www.linkedin.com/advice/0/what-some-voice-modulation-exercises-techniques)
Sweep the audience, or look at the camera, don’t read (3MT)

Not too rigid, not too nuts

135-160 word per minute

EYE CONTACT

GESTURE

PACE

CONFIDENCE

PRACTISE

CONTENT
3MT or VYT feedback and practice

Book a personalised feedback or discussion session on your 3MT or VYT presentation with a Graduate Research Development Advisor:

- Dr Francesca Mataraga (HASS)
  francesca.mataraga@mq.edu.au
- Dr Frank Song (HASS)
  frank.song@mq.edu.au
- Dr Chris Bilsland (Professional Development)
  christine.bilsland@mq.edu.au
- Dr Megan Brewer (STEMM)
  megan.brewer@mq.edu.au

Away 29 June – 21 July

GRD Team Email
gr.development@mq.edu.au
Examples
Third Place for the 2021 VYT / Winner for Swinburne University

https://commons.swinburne.edu.au/items/92f43f18-6ccf-4b4f-b9d5-4a437fd1b117/1/

Ratanapat Suchat

Brand Nostalgia: The Emotional Responses of Thai Students Studying in Australia to Thai Condiment Packaging

PhD, Year 2
School of Design, Swinburne University of Technology

ID 0000-0002-5389-0049

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presented by
Nicola Rivers

“Everything not saved will be lost”

PhD, Final Year
Department of Obstetrics & Gynaecology

0000-0003-0533-3480
@NicRivers_
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$50 for copyright for music
Winner of the 2021 Macquarie Competition: Hamid Yahyaei from the Department of Applied Finance (MQBS): Where does money come from?

Hamid Yahyaei
Department of Applied Finance
Macquarie Business School
Macquarie University

Where Does Money Come From?
Winner of the 2022 Macquarie Competition: Ruby Stephens from the School of Natural Sciences (FSE): How was the ancestor of all flowers pollinated?
Questions?
Megan Brewer, PhD
Graduate Research Development Advisor
(STEMM)
Graduate Research Academy
megan.brewer@mq.edu.au